

# CURRICULUM VITAE

Ilias Lagkouvardos, PhD



## PERSONAL INFORMATION

Name/Surname: Ilias Lagkouvardos  
Date of birth: 25/10/1977  
Place of birth: Chania, Greece  
Nationality: Greek  
Gender: Male  
Marital status: Married with two kids  
[https://www.researchgate.net/profile/Ilias\\_Lagkouvardos](https://www.researchgate.net/profile/Ilias_Lagkouvardos)

## CONTACT INFORMATION

Affiliation: Research Group – Microbial Bioinformatics  
ZIEL –Core Facility Microbiome  
Technische Universität München  
Address: Weihenstephaner Berg 3  
Freising, 85354, Bavaria, Germany  
Telephone: 0049 8161 715 355  
Email: [ilias.lagkouvardos@tum.de](mailto:ilias.lagkouvardos@tum.de)

## RESEARCH PROFILE

I am a microbial ecologist and data integration enthusiast who utilizes bioinformatic methods and tools to address questions related to microbial diversity and ecology in various environments. My primary focus, is the elucidation of the role of distinct microbial compositions in human health and disease by means of sequencing of the versatile 16S rRNA gene. In addition, I explore microbial genomics and metagenomics sequences for insights into the functionality and dynamics of complex microbial communities. One main line of my research is to utilize state-of-the-art methods and tools to build specialized analytical pipelines and thereby develop user-friendly bioinformatic solutions for public use.

## EDUCATION

- |                          |  |
|--------------------------|--|
| 01/10/2007 to 04/12/2014 | <a href="#">University of Vienna</a> (Austria), Department of Microbial Ecology.<br><b>PhD in Biology</b> (Excellent 1/1)  |
| 15/10/2004 to 15/10/2006 | <a href="#">University of Bonn</a> (Germany), Bonn Aachen center for Information Technology. <b>M.Sc. in Life Science Informatics</b> (Good 2.2/1).                    |
| 14/02/2001 to 12/05/2001 | <a href="#">University of Florence</a> (Italy), Department of Zootechnic Sciences.<br><b>ERASMUS/SOCRATES</b> student.   |
| 25/09/1996 to 29/09/2004 | <a href="#">Agricultural University of Athens</a> (Greece), Department of Agricultural Biotechnology. <b>Diploma in Agricultural biotechnology</b> (Very Good 7.1/10). |

## RESEARCH EXPERIENCE

06/10/2022 – Present	<b>Visiting Professor</b> – Head of Microbiome group. Clinical Microbiology Lab, School of Medicine, University of Crete, Greece
01/03/2017 – Present	<b>Research Group Leader</b> – Microbial Bioinformatics. ZIEL Institute for Food and Health, Technical University of Munich, Germany
11/10/2019 – 01/09/2022	<b>Adjunct Academic Staff</b> – Teaching “Proteomics, Genomics and Genetics” at Hellenic Open University, Patras, Greece
01/11/2018 – 31/12/2021	<b>Principal Investigator</b> – Project BIOMIC, Institute of Marine Biology, Biotechnology and Aquaculture HCMR, Heraklion, Greece
01/02/2016 – 01/03/2017	<b>Postdoctoral research associate</b> for the ZIEL Core Facility - Microbiome, of the Technical University of Munich. Main task: Development of analytical pipelines and tools for processing genomic, metagenomic and amplicon data. Supervisor: Prof. Dr. Dirk Haller.
01/02/2014 – 01/02/2016	<b>Postdoctoral research associate</b> in the Junior Research Group of Intestinal Microbiome, of the Technical University of Munich. Focused on analysis of NGS data from gut microbiota. Supervisor: Prof. Dr. Thomas Clavel.
01/11/2007 – 01/12/2014	<b>PhD thesis</b> in the Department of Microbial Ecology at the University of Vienna. Thesis title: Evolutionary origin and phylogenetic diversity of the Chlamydiae phylum. Supervisor: Prof. Dr. Matthias Horn. Grade: 1/1.
01/04/2006 - 30/09/2006	<b>Master Thesis</b> at Kekulé Institute of Organic Chemistry and Biochemistry in Bonn (Germany). Thesis subject: Genomic analysis of the primary metabolism of the uncultivated symbiont “Pseudomonas paederii”. Supervisor: Prof. Dr. Joern Piel. Grade: 2/1.
12/11/2005 - 23/03/2006	<b>Internship</b> at the group of Theoretical Biology of Bonn University. Main task: Production of a mathematical and computational model for the motility of the epithelial cancer cells. Supervisor: Prof. Dr. Wolfgang Alt.
15/01/2004 - 26/09/2004	<b>Diploma thesis</b> at Agricultural University of Athens. Thesis subject: Evolution and Systems of Increasing Complexity. Supervisors: Prof. Dr. John Sourdis and Ass. Prof. Dr. Anna Kourti. Grade: 10/10.
01/07/2000 - 31/08/2000	<b>Practical training</b> at the Institute for Soil technology and Plant Nutrition of Martin Luther University in Halle (Germany). Main task: Building of SOMNET (Soil Organic Matter Network). Supervisor: Dr. Lothar Schmidt.

## QUALIFICATIONS

### Technical Skills

Combination of both informatics (algorithmic design and database management) and laboratory experience (cloning, protein expression and purification, bacterial isolation etc.). Excellent knowledge of microbial genomic and metagenomic sequence analysis (assembly, annotation, functional profiling) with long experience in NGS and traditional amplicon data processing (microbial diversity and ecology) and phylogenetic analysis. Expert in script writing, for assembly of complex pipelines or individual tasks, using Perl and R. Innovative open thinker with good visualization and presentation skills.

**Languages:** Native speaker of **Greek**, fluent in **English** and moderate knowledge of **German**.

### Selective Postgraduate Courses

29/09/2015 – 30/09/2015	<b>Information Technology and Bioinformatics</b> Workshop for the Helmsley IBD Research Network. California Institute of Technology (Los Angeles -USA)
14/09/2015 – 16/09/2015	<b>Metagenomics Bioinformatics</b> Course, held by the European Bioinformatics Institute (Hixton -UK)
06/08/2014 – 15/08/2014	<b>Strategies and Techniques for Analyzing Microbial Population Structures</b> course, held by the Marine Biological Laboratory (Woods Hole - USA)

### COMMUNITY

- **Deputy Member of the Board of Directors** of the [Hellenic Bioinformatics Society](#) (Greece) ([hscbio.wordpress.com](http://hscbio.wordpress.com))
- **Member** of the [Mikrobiokosmos](#) Society (Greece) ([www.mikrobiokosmos.org](http://www.mikrobiokosmos.org))
- **Spokesperson** of Technical University of Munich (TUM), as member of the [NFDI4Microbiota](#) Initiative (Germany) ([nfdi4microbiota.de](http://nfdi4microbiota.de))
- **Member** of [MicrobiomeSupport](#) community (EU) ([www.microbiomesupport.eu](http://www.microbiomesupport.eu))
- **Associate Editor:** “[Microbiome](#)”, “[Animal Microbiome](#)”, “[Environmental Microbiome](#)”
- **Associate Editor:** “[Frontiers in Microbiology](#)” and “[Frontiers in Marine Science](#)”
- **Reviewer:** [GigaScience](#), [Environmental Microbiology](#), [Scientific Reports](#), [PLoS ONE](#), [Frontiers in Microbiology](#), [BMC Genomics](#), [Microbiome](#), [Genome Biology](#) and others

### SUPERVISION

Since 2020	Direct supervisor of <b>5 Master students</b> from “Bioinformatics and Neuroinformatics” program (Hellenic Open University - Greece)
Since 2019	Direct supervisor of a <b>PhD student</b> (University of Crete - Greece) and a MSc graduate (FORTH – Greece) as PI of project “BIOMIC”
Since 2020	Direct supervisor of a <b>PhD student</b> (TUM - Germany) as PI of the project “Secure integrated big data analytics”
2018	Supervised <b>1 Master student</b> from “Bioinformatics” program (University of Crete – Greece)
2014 - 2018	Supervised the Interdisciplinary Projects of <b>12 Informatics master students</b> (6 months each) (TUM - Germany)
2015	Supervised the Bachelor thesis of <b>1 student</b> from “Nutrition Science” program (3 months) (TUM - Germany)

### TEACHING

Since 2022	Co-Organizer and co-lecturer of the annual course “ <b>The human microbiome – from basic research to clinical practice</b> ” at School of Medicine, University of Crete, Greece
Since 2020	Co-Organizer and co-lecturer of the annual course “ <b>Bioinformatics</b> ” in Biomedical Engineering Master program jointly offered by University of Crete, FORTH and Technical University of Crete, Greece

- 2019-2022 Organizer and lecturer of the semi-annual course “**Proteomics, Genomics and Genetics**” in the Master of “Bioinformatics and Neuroinformatics” at Hellenic Open University, Greece
- Since 2017 Organizer and Lecturer of the annual course “**16S rRNA gene amplicon analysis**” in the Master of “Bioinformatics”, at University of Crete, Greece
- 2015 – 2018 Lecturer at the annual practical course “**Experimental immunology and pathology**” of the Chair of Nutrition and Immunology at Technical University of Munich, Germany
- Since 2015 Organizer and Lecturer of the semi-annual seminar “**Hands-on 16S rRNA gene amplicon analysis**” held by ZIEL Institute for food and Health at Technical University of Munich, Germany
- Since 2016 Lecturer at the annual seminar “**Nutrition and Microbe-Host Interactions**” of the Chair of Nutrition and Immunology at Technical University of Munich, Germany

### INVITED TALKS & WORKSHOPS

- Invited Workshop [Hands-on 16S rRNA gene amplicon analysis](#), 14-16 November 2022, **Bahia Blanca**, Argentina
- Invited Talk [Research in Progress](#), 22 June 2021, **Munich**, Germany
- Invited Talk [b-it Lecture Series](#), 13 June 2019, **Bohn**, Germany
- Invited Workshop [8th Conference of Mikrobiokosmos Society](#), 18-20 April 2019, **Patras**, Greece
- Invited Talk [COST Action FA1401 MC Meeting](#), 27-28 September 2018, **Thessaloniki**, Greece
- Invited Workshop [Hands-on 16S rRNA gene amplicon analysis](#), 29-30 November 2017, **Copenhagen**, Denmark
- Invited Workshop [Hands-on 16S rRNA gene amplicon analysis](#), 16-17 December 2015, **Barcelona**, Spain

### PERSONAL FUNDING - GRANTS

1. Period: 2018 – 2021  
 Agency: **H.F.R.I. (Greece)**  
 Call: 1st Call for Research Projects to Support Post-Doctoral Researchers.  
 Title: [Large-scale bioinformatic integration of sequence data for novel insights into microbial diversity and ecology](#).  
 Budget: **155000 Euros**
2. Period: 2019 – 2023  
 Agency: **DFG (Germany)**  
 Call: Collaborative Research Centers  
 Title: [Secure integrated big data analytics](#)  
 Budget: **289000 Euros**
3. Period: 2019 – 2021  
 Agency: **IKY (Greece)**  
 Call: 2<sup>nd</sup> Call for Support of Postdoctoral Researchers  
 Title: [Development and application of machine learning methods in microbiome data of infants through their early years of life for the prediction of their development over adulthood](#).  
 Budget: **27000 Euros**

4. Period: 2021-2022

Agency: **Bayerisches Hochschulzentrum für Lateinamerika (Germany)**

Call: BAYLAT-Anschubfinanzierung (Funding for collaboration and exchange of expertise)

Title: [Effects of Ganoderma polysaccharides on human gut microorganisms.](#)

Budget: **9627 Euros**

5. Period: 2022 – 2024 (decision pending)

Agency: **DFG (Germany)**

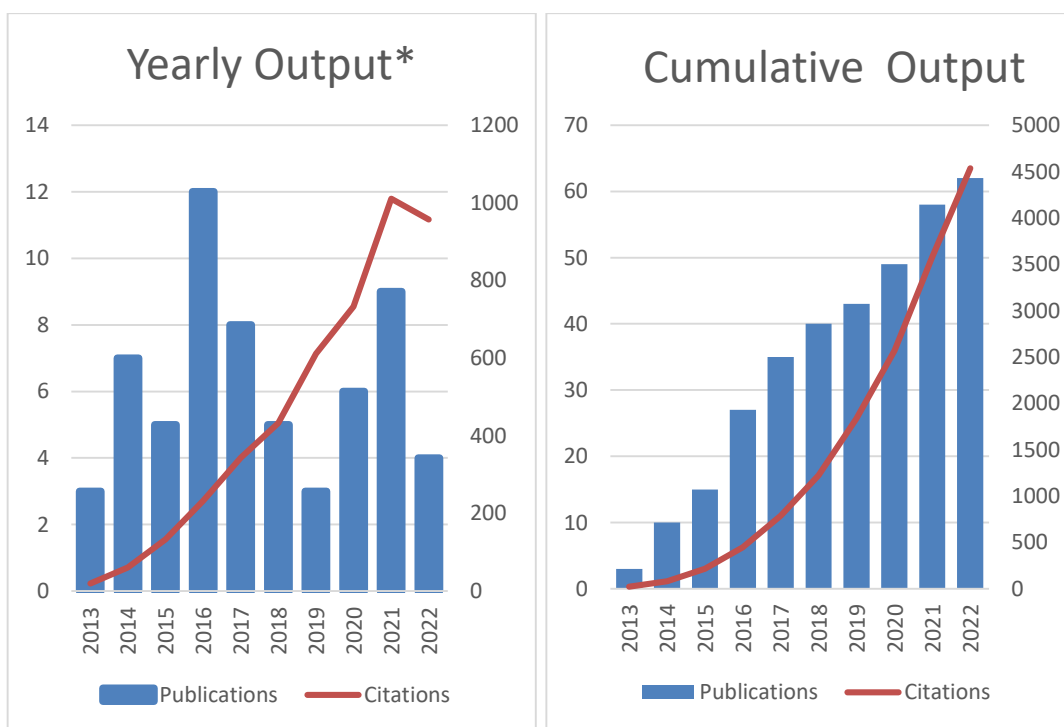
Call: Indo-German Fundamental Research Projects in the Life Sciences

Title: [Synthetic communities to engineer rhizosphere microbiome for improved yield and aflatoxin management in groundnut.](#)

Budget: **208000 Euros**

### BIBLIOGRAPHIC STATISTICS \* (As of November 2022)

Citation	4222	First Author	9
h-index	34	Corresp. Author	6
i10-index	50	Total Publications	62
Cumulative IF	366.5	Average IF	6.2



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\* Manuscripts completed but not officially published yet (5):

- Accepted/In Revision: 1
- Submitted/In Review: 3
- Late Draft/Preprint: 1

## PEER REVIEWED CONFERENCES ANNOUNCEMENTS PRESENTED (12)

1. Kioukis A, Lagkourdos I. “Integration of global amplicon sequence data, a step towards estimation of global microbial diversity”. **12th Hellenic Bioinformatics Conference**, 11 – 13 October **2019**, Heraklion, Greece. (Oral presentation)
2. Lagkourdos I, Clavel T. “Sequence and cultivation study of Muribaculaceae reveals novel species, host preference, and functional potential of this yet undescribed family.” **8th Conference of Mikrobiokosmos Society**, 18-20 April **2019**, Patras, Greece. (Oral presentation)
3. Lagkourdos I, Clavel T. “Updates and applications of the Integrated Microbial NGS platform (IMNGS). A step towards estimation of global diversity”. **17th International Symposium on Microbial Ecology**, 16-18 August **2018**, Leipzig, Germany (Poster presentation)
4. Lagkourdos I, Clavel T. “Towards the estimation of the global microbial diversity by use of the accumulated molecular sequences available by the IMNGS platform”. **7th Mikrobiokosmos Conference**, 7 - 9 April **2017**, Athens, Greece. (Oral presentation)
5. Lagkourdos I, Joseph D, Kapfhammer M, Giritli S, Horn M, Haller D, Clavel T. “IMNGS: A comprehensive open resource of processed 16S rRNA microbial profiles for ecology and diversity studies”. **9th Hellenic Bioinformatics Conference**, 19 – 21 November **2016**, Thessaloniki, Greece. (Oral presentation)
6. Lagkourdos I, Clavel T. “IMNGS: The Integrated Microbial Next Generation Sequencing platform, a tool for the utilization of all available amplicon reads data for microbial ecology”. **EMBL Conference - The Human Microbiome**, 10 – 12 June **2015**, Heidelberg, Germany. (Poster)
7. Lagkourdos I, Haller D, Clavel T. “The integrated Metagenomic Analysis Pipeline (iMAP): Exploration of bacterial diversity and distribution in publically available amplicon sequences”. **Rowett-INRA Conference**, 16 – 18 June **2014**, Aberdeen, UK. (Poster)
8. Lagkourdos I, Weinmaier T, Rattei T, Horn M. “Tapping the metagenomic universe: Diversity, abundance, and distribution of *Chlamydiae*”. **1st EMBO PVC superphylum workshop**, 28 February – 2 March **2013**, Heidelberg, Germany. (Oral presentation)
9. Lagkourdos I, Rattei T, Horn M. “A signature protein for members of the PVC superphylum”. **1st EMBO PVC superphylum workshop**, 28 February – 2 March **2013**, Heidelberg, Germany. (Oral presentation)
10. Lagkourdos I, Rattei T, Horn M. “The Signature of the PVC superphylum”. **8th German Chlamydia Workshop**, 24 - 26 February **2010**, Munich, Germany. (Poster)
11. Heinz E, Tischler P, Lagkourdos I, Rattei T, Horn M. ”COMP – A database for predicted chlamydial outer membrane proteins”. **6th Meeting of European Society for Chlamydia Research**, 1 - 4 July **2008**, Aarhus, Denmark. (Poster)
12. Lagkourdos I, Bouyioukos C, Salichos L, Sourdi A. “Genetic Algorithms and Evolution in NK fitness Landscapes”. **25th Conference of Hellenic Association for Biological Sciences**, 29 May – 1 June **2003**, Mytilene, Greece. (Poster)

## PEER REVIEWED JOURNAL PUBLICATIONS/ BOOK CHAPTERS (62)

(\* Corresponding Author or Shared Correspondence)

1. Tzora A, Nelli A, Kritikou AS, Katsarou D, Giannenas I, [Lagkouvardos I](#), Thomaidis SN, Skoufos I. **2022**. The “Crosstalk” between Microbiota and Metabolomic Profile of Kefalograviera Cheese after the Innovative Feeding Strategy of Dairy Sheep by Omega-3 Fatty Acids. **Foods**
2. \*Kioukis A, [Lagkouvardos I](#). **2022**. Taxonomy Informed Clustering: An optimization method for purer and more informative clusters in diversity analysis and microbiome data processing. **Frontiers in Bioinformatics**
3. \*Intze E, [Lagkouvardos I](#). **2022**. DivCom: The Divide and Compare tool offers deeper insights into microbial profiles by revealing their intrinsic substructure and the use of distances to reference compositions. **Frontiers in Bioinformatics**
4. \*Litos A, Pavlidis P, [Lagkouvardos I](#). **2022**. Cronos: A machine learning based pipeline for the description and predictive modeling of microbiome transitions overtime. **Frontiers in Bioinformatics**
5. Machado M, Dietrich A, Zwiebel M, Ölke B, Lauber M, [Lagkouvardos I](#), Baumbach J, Haller D, Brandl B, Skurk T, Hauner H, Reitmeier S, List M. **2022**. Namco: A microbiome explorer. **Microbial genomics**
6. Heidebrecht HJ, [Lagkouvardos I](#), Reitmeier S, Hengst C, Kulozik U, Pfaffl M. **2021**. Alteration of intestinal microflora of Clostridium difficile infected hamsters during the treatment with specific bovine immunoglobulins. **Antibiotics**
7. Kumar N, Hitch T, Haller D, [Lagkouvardos I](#), Clavel T. **2021**. MiMiC- A bioinformatic approach for generation of synthetic communities from metagenomes. **Microbial Biotechnology**
8. \*Reitmeier S, Hitch CAT, Fikas N, Hausmann B, Ramer-Tait EA, Neuhaus K, Berry D, Haller D, [Lagkouvardos I](#), Clavel T. **2021**. Handling of spurious sequences affects the outcome of high-throughput 16S rRNA gene amplicon profiling. **ISME Communications**
9. Amar Y, [Lagkouvardos I](#), Rafaela Leal Silva RL, Schöler A, Foesel BU, Kublik S, Bleuel R, Zink A, Neuhaus K, Schloter M, Biedermann T, Köberle M. **2021**. Pre-digest of unprotected DNA by benzonase improves the representation of living skin bacteria and efficiently depletes host DNA. **Microbiome**
10. Reitter C, Petzoldt H, Korth A, Schwab F, Stange C, Hamsch B, Tiehm A, [Lagkouvardos I](#), Gescher J, Hügler M. **2021**. Seasonal Dynamics in the Number and Composition of Coliform Bacteria in Drinking Water Reservoirs. **Science of the Total Environment**
11. Christakis AC, Daskalogiannis G, Chatzakis A, Markakis AE, Sagia A, Rizzo FG, Catara V, [Lagkouvardos I](#), Studholme JD, Sarris FP. **2021**. Endophytic bacterial isolates from halophytes demonstrate phytopathogen biocontrol and plant growth promotion under high salinity. **Frontiers in Microbiology**
12. Wenderlein J, Böswald L, Ulrich S, Kienzle E, Neuhaus K, [Lagkouvardos I](#), Zenner C, Straubinger R. **2021**. Processing matters in nutrient-matched laboratory diets for mice microbiome. **Animals**
13. Hitch CAT, Afrizal A, Riedel T, Kioukis A, [Lagkouvardos I](#), Haller D, Overmann J, Clavel T. **2021**. Recent advances in culture-based gut microbiome research. **Int J Med Microbiol**
14. Wylensek D, Hitch T, Riedel T, Afrizal A, Kumar N, Wortmann E, Liu T, Devendran S, Lesker T, Hernández S, Heine V, Buhl E, D’Agostino P, Cumbo F, Fischöder T, Wyschkon M, Looft T, Parreira V, Abt B, Doden H, Ly L, Alves J, Reichlin M, Flisikowski K, Suarez L, Neumann A, Suen G, de Wouters T, Rohn S, [Lagkouvardos I](#), Allen-Vercoe E, Spröer C,

- Bunk B, Taverne-Thiele A, Giesbers M, Wells J, Neuhaus K, Schnieke A, Cava F, Segata N, Elling L, Strowig T, Ridlon J, Gulder T, Overmann J, Clavel T. **2020**. A collection of bacterial isolates from the pig intestine reveals functional and taxonomic diversity. **Nature Communications**
15. Hartstra VA, Schüppel V, Imangaliyev S, Schrantee A, Prodan A, Collard D, Levin E, Dallinga-Thie G, Ackermans TM, Winkelmeijer M, Havik RS, Metwaly A, [Lagkouvardos I](#), Nier A, Bergheim I, Heikenwalder M, Dunkel A, Nederveen JA, Liebisch G, Mancano G, Claus PS, Benítez-Páez A, Bergman JJ, Gerdes V, Sanz Y, Booij J, Kemper E, Groen KA, Serlie JM, Haller D, Nieuwdorp M. **2020**. Infusion of donor feces affects the gut-brain axis in humans with metabolic syndrome. **Mol Metab**
  16. Metwaly A, Dunkel A, Waldschmitt N, Raj ACD, [Lagkouvardos I](#), Corraliza A, Mayorgas A, Martinez-Medina M, Reiter S, Schloter M, Hofmann T, Allez M, Panes J, Salas A, Haller D. **2020**. Integrated microbiota and metabolite profiles identified functional signatures in Crohn's disease with a link to sulfur metabolism. **Nature Communications**
  17. Rettenmaier R, Lo YK, Schmidt L, Munk B, [Lagkouvardos I](#), Neuhaus K, Liebl W, Zverlov V. **2020**. A novel primer mixture for GH48 genes improves quantification and identification of truly cellulolytic bacteria. **Microorganisms**
  18. Heinze S, [Lagkouvardos I](#), Liebl W, Schwarz W. H., Kornberger P, & Zverlov VV. **2020**. Draft Genome Sequence of *Paenibacillus polymyxa* DSM 292, a Gram-Positive, Spore-Forming Soil Bacterium with High Biotechnological Potential. **Microbiology Resource Announcements**
  19. Lesker TR, Durairaj AC, Gálvez EJ., [Lagkouvardos I](#), Baines JF, Clavel T, Sczyrba A, McHardy AC, Strowig T. **2020**. An Integrated Metagenome Catalog Reveals New Insights into the Murine Gut Microbiome. **Cell reports**
  20. Kellerer T, Ott B, Büttner J, [Lagkouvardos I](#), Hauner H, Skurk T. **2019**. Impact of laparoscopic sleeve gastrectomy on gut permeability in morbidly obese subjects. **Obes Surg**
  21. [Lagkouvardos I](#), Lesker TR, Hitch TCA, Galvez EJC, Smit N, Neuhaus K, Wang J. Baines JF, Abt B, Stecher B, Overmann J, Strowig T, Clavel T. **2019**. Sequence and cultivation study of *Muribaculaceae* reveals novel species, host preference, and functional potential of this yet undescribed family. **Microbiome**
  22. Ke X, Walker A, Haange SB, [Lagkouvardos I](#), Liu Y, Schmitt-Kopplin P, Bergen MV, Jehmlich N, He X, Clavel T, Cheung PCK. **2019**. Synbiotic-driven improvement of metabolic disturbances is associated with changes in the gut microbiome in diet-induced obese mice. **Mol Metab**
  23. Coleman OI, Lobner EM, Bierwirth S, Sorbie A, Waldschmitt N, Rath E, Berger E, [Lagkouvardos I](#), Clavel T, McCoy KD, Weber A, Heikenwalder M, Janssen KP, Haller D. **2018**. Activated ATF6 induces intestinal dysbiosis and innate immune response to promote colorectal tumorigenesis. **Gastroenterology**
  24. Anderson AC, Rothballer M, Altenburger MJ, Woelber JP, Karygianni L, [Lagkouvardos I](#), Hellwig E, Al-Ahmad A. **2018**. In-vivo shift of the microbiota in oral biofilm in response to frequent sucrose consumption. **Sci Rep.**, 8(1), 14202.
  25. Yoon H, Schaubeck M, [Lagkouvardos I](#), Blesl A, Heinzlmeir S, Hahne H, Clavel T, Panda S, Christina Ludwig C, Kuster B, Manichanh C, Kump P, Haller D, Hörmannspurger G. **2018**. Increased Pancreatic Protease Activity in Response to Antibiotics Impairs Gut Barrier and Triggers Colitis. **Cell Mol Gastroenterol Hepatol**.
  26. \*Clavel T. and [Lagkouvardos I](#). **2018**. Acetatifactor . In **Bergey's Manual of Systematics of Archaea and Bacteria** (eds M.E. Trujillo, S. Dedysh, P. DeVos, B. Hedlund, P. Kämpfer, F.A. Rainey and W.B. Whitman).



27. Ott B, Skurk T, Clavel T, [Lagkourdos I](#), Büttner J, Lichtenegger M, Lechner A, Rychlik M, Haller D, Hauner H. **2018**. Short-Term overfeeding with dairy does not modify gut permeability, the fecal microbiota or glucose metabolism in young healthy men. **J Nutr**
28. Ott B, Skurk T, Hastreiter L, [Lagkourdos I](#), Fischer S, Büttner J, Kellerer T, Clavel T, Rychlik M, Haller D, Hauner H. **2017**. Effect of caloric restriction on gut permeability, inflammation markers, and fecal microbiota in obese women. **Sci Rep**.
29. Bazanella M, Maier T, Clavel T, [Lagkourdos I](#), Lucio M, Maldano-Gómez M., Autran C, Walter J, Bode L, Schmitt-Kopplin P, Haller D. **2017**. Randomized controlled trial on the impact of early-life intervention with bifidobacteria on the healthy infant fecal microbiota and metabolome. **Am J Clin Nutr**.
30. Clavel T, Gomes-Neto JC, [Lagkourdos I](#), Amanda E. Ramer-Tait. **2017**. Deciphering interactions between the gut microbiota and the immune system via microbial cultivation and minimal microbiomes. **Immunol Rev**.
31. Clavel T, [Lagkourdos I](#), Stecher B. **2017**. From complex gut communities to minimal microbiomes via cultivation. **Curr Opin Microbiol**.
32. Fiamoncini J, Yorkas AM, Gedrich K, Rundle M, Alsters SI, Roeselers G, van den Broek TJ, Clavel T, [Lagkourdos I](#), Wopereis S., Frost GS, van Ommen B., Blakemore AIF, Daniel H. **2017**. Determinants of post-prandial plasma bile acid kinetics in human volunteers. **Am J Physiol Gastrointest Liver Physiol**.
33. [Lagkourdos I](#), Overmann J., Clavel T. **2017**. Cultured microbes represent a substantial fraction of the human and mouse gut microbiota. **Gut Microbes**.
34. \*[Lagkourdos I](#), Fischer S, Kumar N, and Clavel T. **2017**. Rhea: a transparent and modular R pipeline for microbial profiling based on 16S rRNA gene amplicons. **PeerJ** 5:e2836.
35. Speth DR, [Lagkourdos I](#), Wang Y, Qian PY, Dutilh BE, and Jetten MS. **2017**. Draft Genome of *Scalindua rubra*, Obtained from the Interface Above the Discovery Deep Brine in the Red Sea, Sheds Light on Potential Salt Adaptation Strategies in Anammox Bacteria. **Microb Ecol**.
36. Bui TP, Shetty SA, [Lagkourdos I](#), Ritari J, Chamlagain B, Douillard FP, Paulin L, Piironen V, Clavel T, Plugge CM, and de Vos WM. **2016**. Comparative genomics and physiology of the butyrate-producing bacterium *Intestinimonas butyriciproducens*. **Environ Microbiol Rep** 8:1024-1037.
37. Zantow J, Just S, [Lagkourdos I](#), Kisling S, Dubel S, Lepage P, Clavel T, and Hust M. **2016**. Mining gut microbiome oligopeptides by functional metaproteome display. **Sci Rep** 6:34337.
38. Kubeck R, Bonet-Ripoll C, Hoffmann C, Walker A, Muller VM, Schuppel VL, [Lagkourdos I](#), Scholz B, Engel KH, Daniel H, Schmitt-Kopplin P, Haller D, Clavel T, and Klingenspor M. **2016**. Dietary fat and gut microbiota interactions determine diet-induced obesity in mice. **Mol Metab** 5:1162-1174.
39. [Lagkourdos I](#), Joseph D, Kapfhammer M, Giritli S, Horn M, Haller D, and Clavel T. **2016**. IMNGS: A comprehensive open resource of processed 16S rRNA microbial profiles for ecology and diversity studies. **Sci Rep** 6:33721.
40. [Lagkourdos I](#), Pukall R, Abt B, Foessel BU, Meier-Kolthoff JP, Kumar N., ... and Clavel T. **2016**. The Mouse Intestinal Bacterial Collection (miBC) provides host-specific insight into cultured diversity and functional potential of the gut microbiota. **Nat Microbiol** 1:16131.
41. Clavel T, [Lagkourdos I](#), and Hiergeist A. **2016**. Microbiome sequencing: challenges and opportunities for molecular medicine. **Expert Rev Mol Diagn** 16:795-805.
42. Schwerd T, Frivolt K, Clavel T, [Lagkourdos I](#), Katona G, Mayr D, Uhlig HH, Haller D, Koletzko S, and Bufler P. **2016**. Exclusive enteral nutrition in active pediatric Crohn disease: Effects on intestinal microbiota and immune regulation. **J Allergy Clin Immunol** 138:592-596.

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